I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being deposited with the U.S. Postal Service on the date shown below with sufficient postage as First Class Mail, in an envelope addressed to: MS Amendment, Commissioner for Patents, N.O. Box 1450, Alexandria, VA 22313-1450.

Docket No.: TNA-005.05 (PATENT)

Dated: May 23, 2007

Signature: Aubour

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

e Patent Application of:

Jin-An Jiao *et al.* 

Application No.: 10/764,140

10/764,140 Confirmation No.: 6085

Filed: January 22, 2004 Art Unit: 1647

For: ANTIBODIES FOR INHIBITING BLOOD

COAGULATION AND METHODS OF USE

**THEREOF** 

Examiner: C. M. Borgeest

## SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

<u>UNDER CFR 1.97(c)(2)</u>

MS Amendment Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

05/29/2007 EFLORES 60000033 061448 10764140

01 FC:1825 189.29 DA

Dear Sir:

Pursuant to 37 CFR 1.56, 1.97(d)(2), and 1.98, the attention of the Patent and Trademark Office is hereby directed to the reference listed on the attached PTO/SB/08. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the reference be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

Applicants have listed dates of publication on the attached PTO/SB/08 for the cited document based on information presently available to the undersigned. However, the listed publication date should not be construed that the information in the cited document was actually published or otherwise publicly available on the date indicated.

Application No.: 10/764,140 2 Docket No.: TNA-005.05

This submission does not represent that a search has been made or that no better art exists. Nor does it constitute an admission that each or all of the listed documents are material or constitute "prior art." Further, if the Examiner applies any of the documents as prior art against any claim in the application and Applicants determine that the cited documents do not constitute "prior art" under United States law, Applicants reserve the right to present to the Office the relevant facts and law regarding the appropriate status of such documents. Moreover, the Applicants further reserve the right to take appropriate action to establish the patentability of the disclosed invention over the listed documents, should one or more of the documents be applied against the claims of the present application.

Please charge our Deposit Account No. 06-1448 in the amount of \$180.00 covering the fee set forth in 37 CFR 1.17(p). The Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our **Deposit Account No. 06-1448, under Reference No. TNA-005.05**. A duplicate copy of this paper is enclosed.

Dated: May 23, 2007

Respectfully submitted,

Jennifer A. Zarutskie

Registration No.: 50,558

FOLEY HOAG LLP

155 Seaport Blvd

Boston, Massachusetts 02210

(617) 832-1754

Attorney for Applicants

PTO/SB/08A/B (09-06)

Approved for use through 03/31/2007. OMB 0651-0031 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO				Complete if Known		
				Application Number	10/764,140-Conf. #6085	
INF	ORMATIC	N DI	SCLOSURE	Filing Date	January 22, 2004	
STATEMENT BY APPLICANT			APPLICANT	First Named Inventor	Jin-An Jiao	
				Art Unit	1647	
(Use as many sheets as necessary)			necessary)	Examiner Name	C. M. Borgeest	
eet	1 .	of	7_	Attorney Docket Number	TNA-005.05	

U.S. PATENT DOCUMENTS							
Examiner	C:1-	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or	Pages, Columns, Lines, Where		
Initials*	Cite No. <sup>1</sup>	Number-Kind Code <sup>2</sup> ( if known)		Applicant of Cited Document	Relevant Passages or Relevant Figures Appear		

		FOREIC	ON PATENT	DOCUMENTS		
Examiner	Cite	Foreign Patent Document	Publication	Name of Patentee or	Pages, Columns, Lines,	
Initials*	No.1	Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)	Date MM-DD-YYYY	Applicant of Cited Document	Where Relevant Passages or Relevant Figures Appear	
					7	

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at <a href="https://www.uspto.og/">www.uspto.og/</a> or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	CA	Bernhard, Gordon, R. et al., "Efficacy and Safety of Recombinant Human Activated Protein C for Severe Sepsis," The New England Journal of Medicine 344:699-709 (2001)	
	СВ	Bernhard, Gordon, R. et al., "Severe Sepsis - A New Treatment with Both Anticoagulant and Antiinflammatory Properties," The New England Journal of Medicine 344:759-762 (2001)	
	CC	Bird et al., "Single-Chain Antigen-Binding Proteins," Science 242(4877):423-6 (1988)	
	CD	Bokarewa et al., "Intra-articular tissue factor/factor VII complex induces chronic arthritis," Inflamm Res. 51(9):471-7 (2002)	
	CE	Busso et al., "Role of the Tissue Factor Pathway in Synovial Inflammation," Arthritis Rheum 48(3):651-9 (2003)	
	CF	Furmaniak-Kazmierczak et al., "Studies of Thrombin-induced Proteoglycan Release in the Degradation of Human and Bovine Cartilage," J. Clin. Invest. 94:472-480 (1994)	
	CG	Huston et al., "Protein engineering of antibody binding sites: Recovery of specific activity in an anti-digoxin single-chain Fv analogue produced in <i>Escherichia coli</i> ," Proc. Natl. Acad. Sci. USA 85:5879-5883 (1988)	
	СН	Jones et al., "Replacing the complementarity-determining regions in a human antibody with those from a mouse," Nature 321:522-525 (1986)	
	CI	Junghans et al., "Pharmacokinetics and bioactivity of 1, 4, 7, 10-tetra-azacylododecane off', N", N"'-tetraacetic acid (DOTA)-bismuth-conjugated anti-Tac antibody for alpha-emitter (212Bi) therapy, Cancer Research 53(23):5683-9 (1993)	
,	CJ	Kincaid-Smith, Priscilla, "Participation of intravascular coagulation in the pathogenesis of glomerular and vascular lesions," Kidney International 7:242-253 (1975)	
	СК	Kozbor et al., "The production of monoclonal antibodies from human lymphocytes," Immunology Today, 4:72-79 (1983)	
	CL	Marty et al., "Amelioration of collagen-induced arthritis by thrombin inhibition," Journal of Clin. Invest. 107(5):631-640 (2001)	

Examiner	Date	
Signature	Considered	

PTO/SB/08A/B (09-06)
Approved for use through 03/31/2007. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Sut	ostitute for form 1449/PTC	)		Complete if Known		
				Application Number	10/764,140-Conf. #6085	
11	<b>NFORMATIO</b>	N DIS	SCLOSURE	Filing Date	January 22, 2004	
S	TATEMENT	BY A	PPLICANT	First Named Inventor	Jin-An Jiao	
				Art Unit	1647	
	(Use as many sheets as necessary)			Examiner Name	C. M. Borgeest	
Sheet	2	of	2	Attorney Docket Number	TNA-005.05	

СМ	Mechtcheriakova et al., "Specificity, diversity, and convergence in VEGF and TNF-α signaling events leading to tissue factor up-regulation via EGR-1 in endothelial cells," The FASEB Journal 15:230-242 (2001)	
CN	Minnema et al.,"Recombinant human antrithrombin III improves survival and attenuates inflammatory responses in baboons lethally challenged with <i>Escherichia coli</i> ," Blood 95(4):1117-1123 (2000)	
СО	More et al., "Immunohistochemical study of tissue factor expression in normal intestine and idiopathic inflammatory bowel disease," J. Clin. Pathol. 46:703-708 (1993)	
СР	Morris et al., "Thrombin in inflammation and healing: relevance to rheumatoid arthritis," Annals of the Rheumatic Diseases 53:72-79 (1994)	
CQ	Morrison, Sherie, "Transfectomas Provide Novel Chimeric Antibodies," Science 229:1202-1207 (1985)	
CR	Nakano et al., "Characteristics of the protease activity in synovial fluid from patients with rheumatoid arthritis and osteoarthritis," Clinical and Experimental Rheumatology 17:161-170 (1999)	
CS	Oi, V.T. et al., "Chimeric Antibodies," BioTechniques, 4(3):214-221 (1986)	
СТ	Olsson and Kaplan, "Human-Human Monoclonal Antibody-Producing Hybridomas: Technical Aspects," Methods in Enzymology 92:3-16 (1983)	
CU	Osterud et al., "Induction of Tissue Factor Expression in Whole Blood: Lack of Evidence for the Presence of Tissue Factor Expression in Granulocytes," Thromb Haemost 83:861-7 (2000)	
CV	Segal et al. "Tissue Factor Activity in Patients with Systemic Lupus Erythematosus: Association with Disease Activity," The Journal of Rheumatology 27:2827-2832 (2000)	
cw	Schopf et al., "Enhanced procoagulant activity of mononuclear leukocytes in patients with atopic dermatitis and psoriasis," Arch Dermatol Res, 285:305-309 (1993)	
СХ	Shen et al., "Vascular Endothelial Growth Factor KDR Receptor Signaling Potentiates Tumor Necrosis Factor-induced Tissue Factor Expression in Endothelial Cells," The Journal of Biological Chemistry 276(7):5281-5286 (2001)	
CY	Varisco et al., "Effect of thrombin inhibition on synovial inflammation in antigen induced arthritis," Annal of Rheumatic Diseases 59:781-787 (2000)	
CZ	Wakefield et al., "Immunohistochemical study of vascular injury in acute multiple sclerosis," J. Clin. Pathol. 47:129-133 (1994)	
CA1	Webber et al., "Preparation and Characterization of a Disulfide-Stablized Fv Fragment of the Anti-Tac Antibody: Comparison with its Single-Chain Analog," Molecular Immunology 32(4):249-258 (1995)	
CB1	Weinberg et al., "Extravascular Fibrin Formation and Dissolution in Synovial Tissue of Patients with Osteoarthritis and Rheumatoid Arthritis," Arthritis and Rheumatism 34(8):996-1005 (1991)	
CC1	Welty-Wolf et al., "Coagulation Blockade Prevents Sepsis-induced Respiratory and Renal Failure in Baboons," American Journal of Respiratory and Critical Care Medicine 164:1988-1996 (2001)	
CD1	Yamashita et al., "Tissue Factor Expression Is a Clinical Indicator of Lymphatic Metastasis and Poor Prognosis in Gastric Cancer With Intestinal Phenotype," J. Surg. Oncol., October 25, 2006, [Epub ahead of print].	
CE1	Zeher et al., "Fibrinolysis-Resistant Fibrin Deposits in Minor Labial Salivary Glands of Patients with Sjogren's Syndrome," Clinical Immunology and Immunopathology 71(2):149-155 (1994)	

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Examiner		Date	
Signature	<u> </u>	Considered	

<sup>&</sup>lt;sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>Applicant is to place a check mark here if English language Translation is attached.